

Denepox LM

2-component flexible epoxy injection resin for concrete injections. Denepox LM can be used in either dry or wet conditions.



• field of application

- Low pressure injection for flexible bonding of cracks and micro-cracks in dry or wet concrete.
- Bonding.
- Sealing of porous low density concrete.
- Flexible joints in floors.
- Denepox LM is not suited for applications in contact with moving water.

• advantages

- Insensitive to humidity.
- Cures in damp/wet environment.
- Deep penetration in the cracks.
- Very good adhesion: exceeds concrete cohesion.
- Solvent free.
- Cured Denepox LM is resistant to acids, alkalis, oils, greases and petroleum derivatives^(*).

• description

Pre-weighted 2-component epoxy resin, which cures into a flexible compound. Suitable for applications in dry or wet structures with slight movements, where a flexible product is required.

A-component : epoxy resin.

B-component : polyamine hardener.

• application

1. Surface preparation

- Surfaces to be repaired or sealed must be clean and sound. The concrete surface must be free of dust, laitance, sealers, grease or any other contaminants that might influence bonding of the resin to the concrete.

2. Injection ports

- Entry ports for injecting should be approved devices spaced at appropriate intervals to accomplish full penetration of the resin into the cracks or voids.

Drilled ports.

- Drilling of cracks for packers needs to be executed in accordance with local regulations. After drilling the hole, insert packer.

Glued ports (plastic or metal).

- The injection ports should be fixed to the surface of the crack with Multitek Adhesive SD (dry surface) or Multitek Adhesive SDW (damp surfaces).
- Apply a layer of Multitek Adhesive SD, Multitek Adhesive SDW (damp surfaces), polyester paste or fast curing cement to the surface of the crack.

• **technical data/properties**

3. Mixing

- Mix the pre-weighted quantities of resin (A-component) and hardener (B-component) with a low speed mixer (300 rpm) until a homogeneous liquid is obtained. Never mix more material than the quantity that can be used up within 20 minutes.
- Mix ratio A/B: 1/1,1 by weight.

4. Injection

- The crack can be injected with a manual (single piston) pump or a mechanical (single or double piston) injection pump.
- Uncured material and equipment should be cleaned with solvent MEK.

Property	Value	Norm
A-component		
Density at 23°C	Approx. 1.11 g/cm ³	ASTM D-638
Viscosity at 25°C	Approx. 850 - 990 mPa.s	ISO 3219
B-component		
Density at 23°C	Approx. 0.97 g/cm ³	ASTM D-638
Viscosity at 25°C	Approx. 500 - 1700 mPa.s	ISO 3219
Mixture		
Viscosity at 25°C	Approx 1000 mPa.s	ISO 3219
Pot life (100 g at 25°C)	Approx. 25 minutes	Test DNT
Full cured Denepox LM		
Hardness	Approx 95 Shore A Approx. 40 – 45 Shore D	ISO 868
Tensile strength	> 4 N/mm ²	ISO 527
Elongation at break	Approx 70 %	ISO 527
Tear Resistance	Approx 24N/mm	ISO 34-1
Adhesion to dry concrete cohesion	Surpasses concrete	ISO 4624
Adhesion to wet concrete	> 3 N/mm ²	JC/T 1041-2007
Minimum application temperature	10°C	Test DNT

Full chemical or mechanical resistances are only reached after a curing period of 14 days at 20°C. Mechanical properties of epoxy resins decrease at temperatures higher than 50°C

• **appearance**

Pre-weighted kit

- A-component : transparent liquid.
- B-component : yellow transparent liquid.
- Cured material : amber transparent.

• **consumption**

Has to be estimated by the engineer or operator and depends on width and depth of the cracks and voids.

• **packaging**

Denepox LM

4,2 kg set

- A-component : net 2 kg metal pail.
- B-component : net 2,2 kg metal pail.

42 kg set

- A-component : net 20 kg metal pail.
- B-component : net 22 kg metal pail.

• **storage**

DenePox LM should be stored under cover, clear of the ground in a dry location. Protect from moisture and frost.
Shelf life: 2 years.

• **accessories**

To be ordered separately

- IP 1C-Manual hand pump.
- IP 1C-Compact electrical airless diaphragm pump.
- Packers and connectors.

(Please consult the relevant Technical Data Sheets)

• **health & safety**

Denepox LM A-component is classified as irritating.

Denepox LM B-component is classified as corrosive.

Always wear protective clothing ,gloves and protective goggles.

For full information, consult the relevant Material Safety Data Sheet.

(*) For chemical resistance please contact your De Neef representative.

*All data mentioned on this technical data sheet are product descriptions. They are the result of general experience and experiments and don't take any specific application into account. No further demands may be derived from these data. The manufacturer has the privilege to implement technical changes, which result from new research concerning the material composition and form. To verify that you are holding the latest version of this Technical Data Sheet, please visit www.deneef.com.
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